

HP 13220

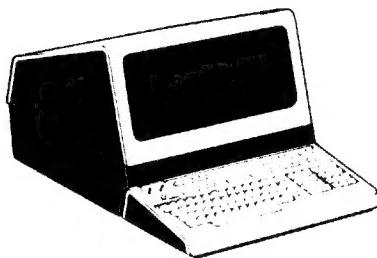
TECHNICAL INFORMATION PACKAGE

Manual Part No. 13220-91000

REVISED

AUG-20-82

DATA TERMINAL
TECHNICAL INFORMATION



HEWLETT  PACKARD

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NOTE: This document is part of the 262XX DATA TERMINAL product series Technical Information Package (HP 13220).

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PREFACE

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This manual contains engineering design and application information for the HP 262XX Data Terminal product line integral modules.

The first printing of this manual reflects the PCA date codes currently being manufactured and as indicated on the applicable parts list. Earlier versions of the PCA's are not described or referenced. Date codes also appear in the upper left hand corner of each component location diagram near the HP logo. Date codes appear in the following format:

A-1620-42

The "A" field is incremented when changes to artwork occur. The next field "16" reflects the year, and the "20" indicates the calendar week in which the last change to the PCA occurred. The "42" indicates the manufacturing division.

The manual will be revised, when necessary, to incorporate new product information or to reflect extensive changes. Updated versions of the manual are available upon request through normal purchasing channels.

Additional information for the product line can be found in the manual supplied with the product. Microcode information is contained in the following documents:

HP PART NO.	DESCRIPTION
13220-90001	2621A Operating System Microcode

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| **HOW TO USE THIS MANUAL**

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ORGANIZATION.

The manual is organized into functional modular sections. Each module represents one or more PCA's required to perform the module function. A table cross referencing PCA's to modules as well as a table cross referencing modules with applicable products are included in this section. Each module section is presented in accordance with a format described as follows:

1.0 INTRODUCTION.

This section describes the major functional properties of the module. It includes key performance specifications and properties distinguishing this module from other similar modules.

2.0 OPERATING PARAMETERS.

This section contains various tables relating to physical parameters including reliability and environmental information, power supply, and clock requirements. Additional tables are included (where applicable) to aid in software and firmware discussions.

Table 1.0 Physical Parameters

The PCA's required for module operation are listed by part number. Size and weight are indicated where applicable.

Table 2.0 Reliability and Environmental Information

The specific environmental capabilities of each 262XX product are as stated in the specification section of the Product Data Sheets.

Hewlett-Packard Class B testing is defined as follows: "CLASS B (Industrial and Commercial Environment). Light industrial manufacturing or commercial environment suitable for occupancy by operating personnel on a full time basis without benefit of air conditioning or other protective measures. Environment may involve moderately high and low temperatures; humidity variations; and occasional minor vibration. Individual Data Systems Products will be designed to meet the requirements of this classification to assure minimum costs and complexity when they are incorporated in system cabinet configurations."

"Type tested at product level" implies that environmental qualification has been performed with the module included in an appropriate product.

"Failure Rate" is defined as the percentage of units expected to fail every 1000 hours of operation under typical operating conditions. Failure rate for a composite product may be derived by adding individual module failure rates.

Table 3.0 Power Supply and Clock Requirements

Indicates the measured power supply and clock requirements for the module total at +/-5% unless otherwise noted. Composite product power requirements may be derived by adding individual module power requirements. Total power available is listed in the Power Supply Module sections.

Table 4.0 Connector Information

Lists all connectors and pin numbers used by the module. Signal names and a brief description are given. Specific PCA's are referenced in the table title (when necessary) to avoid confusion. Bars are used over signal names indicating negative true logic (XXXXX XXX) functions.

3.0 FUNCTIONAL DESCRIPTION.

This section describes the general overall functional operation of the module and references the module block diagram. Each block on the block diagram is described in a general functional manner relating what the block does and why. A detailed description relating how the functions are performed, from the schematic diagram perspective, follows:

4.0 MISCELLANEOUS.

Additional miscellaneous information relating to the module or its operation is included here (when applicable).

Each module section is appended with support drawings and diagrams as follows:

Block Diagram - Illustrates the overall module function.

Schematic Diagram - All PCA schematics pertaining to the module are included.

Timing Diagrams - Included (when applicable) to support module usage.

Component Location Diagrams - Locates position of components on PCA by reference designator. Indicates date code of the PCA at time of manual printing.

Miscellaneous Support Drawings - Included (when applicable) to support module usage.

Parts Lists - A listing by assembly of replaceable parts. The PCA parts lists reflect the currently manufactured PCA's as indicated by the date codes.

PCA ASSEMBLY/MODULE CROSS-REFERENCE

MODULE NUMBER	ASSY NUMBER
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13220-91000	INTRODUCTION
13220-91001	02620-60001
13220-91001	02620-60070
13220-91002	02620-60002
13220-91004	02620-60004
13220-91019	02620-60019
13220-91033	02620-60033
13220-91061	02620-60061
13220-91088	02620-60088
13220-91087	02620-60087/60096
13220-91097	02620-60097/60178
13220-91175	02620-60175

PRODUCT/MODULE CROSS-REFERENCE

CODE: O=Option S=Standard

Module Number	Module Nomenclature	2621A	2621P
13220-91001	Keyboard	S	S
13220-91001	Intl Keyboard	O	O
13220-91002	Sweep	S	S
13220-91004	Power Supply	S	-
13220-91019	'P' Power Supply	-	S
13220-91033	Processor 4-Layer	O	O